

REMARKS

Claims 1-14 are pending herein.

Claims 1-14 are rejected.

Claims 1 and 11 are currently amended.

Claim rejections under 35 U.S.C. 102

Claim 1 was rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. (U.S. Pat. No. 6,170,165).

It is respectfully submitted that Chen et al. fails to anticipate amended claim 1 under 35 U.S.C. 102(b).

Reference is made to MPEP 2131, which states, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference". *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

It is respectfully submitted that Chen et al. fails to disclose an apparatus comprising "a knife ring having a base and a tapered edge extending from said base vertically adjustably mounted beneath [a] support; and an automatic vertical adjustment mechanism operably engaging said base of said knife ring...", as set forth in amended claim 1.

Therefore, it is respectfully submitted that Chen et al. fails to disclose "each and every element" as set forth in amended claim 1.

Serial No.: 10/658,708

Accordingly, it is respectfully submitted that Chen et al. fails to anticipate amended claim 1 under 35 U.S.C. 102(b), according to the criteria for anticipation set forth by the Federal Circuit decision in *Verdegaal Bros. v. Union Oil Co. of California*. Reconsideration and allowance of amended claim 1 is therefore respectfully solicited.

Claim Rejections under 35 U.S.C 103

Claims 2-14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al., as applied to claim 1 above, in view of Tateyama et al. (U.S. Pat. No. 5,871,584).

It is respectfully submitted that Chen et al. in view of Tateyama et al. fails to render claims 2-14 obvious within the contemplation of 35 U.S.C. 103(a) on the grounds that Chen et al. in view of Tateyama et al. fails to teach or suggest all of the limitations of the claims, as hereinafter discussed in detail.

Chen et al. in view of Tateyama et al. fails to teach invention of claims 2-10

It is respectfully submitted that Chen et al. in view of Tateyama et al. fails to render claims 2-10, as dependent from amended claim 1, obvious within the contemplation of 35 U.S.C 103(a) since Chen et al. in view of Tateyama et al. fails to teach or suggest all of the limitations of amended claim 1, and

Serial No.: 10/658,708

therefore, claims 2-10 as dependent therefrom (MPEP 2143.03).

Chen et al. teaches an apparatus comprising a knife edge ring (Fig. 1, reference numeral 40) which is inserted between a base portion (34) of a drain cup (30) and a backside (26) of a substrate. In col. 2, lines 17-26, the Chen et al. patent teaches that the knife edge ring (40) is adjusted with respect to the backside (26) of a wafer "by using a set of feeler gauges including the feeler gauge 50 shown in FIG. 2". Chen et al. fails to teach or suggest providing an automatic vertical adjustment mechanism in operable engagement with a base of the knife edge ring to raise and lower the ring.

Tateyama et al. teaches a processing apparatus comprising a substrate support (reference numeral 21 in Fig. 11) and a container (32) engaged by several lift cylinders (35) for adjusting the proximity of the container (32) with respect to a substrate on the substrate support. However, Tateyama et al. fails to teach or suggest substituting the container (32) with a knife edge ring "having a base and a tapered edge extending from said base" and adapting the lift cylinders to engage the base and raise and lower the knife ring with respect to a substrate on the substrate support.

It is respectfully submitted that Chen et al. in view of Tateyama et al. would fail to provide any teaching, suggestion or motivation to a person of ordinary skill in the art to adapt the vertical adjustment mechanism of the Tateyama et al. device

Serial No.: 10/658,708

to raise and lower the knife edge ring of the Chen et al. device, since the presence of the base member (34) of the Chen et al. device, on which the knife edge ring is supported, would prohibit engagement of the vertical adjustment mechanism with the base of the knife edge ring.

Accordingly, it is respectfully submitted that Chen et al. in view of Tateyama et al. fails to teach or suggest all of the limitations of claims 2-10 as dependent from amended claim 1, as required for a finding of obviousness under 35 U.S.C. 103(a). Reconsideration and allowance of claims 2-10 is therefore respectfully solicited.

Chen et al. in view of Tateyama et al. fails to teach invention of claims 11-14

It is respectfully submitted that Chen et al. in view of Tateyama et al. fails to render amended claim 11, and claims 12-14 as dependent therefrom, obvious within the contemplation of 35 U.S.C 103(a) since Chen et al. in view of Tateyama et al. fails to teach or suggest all of the limitations of amended claim 11, and therefore, claims 12-14 as dependent therefrom, for the same reasons as set forth herein above with respect to claims 2-10.

Thus, it is respectfully submitted that Chen et al. in view of Tateyama et al. fails to render claims 11-14 obvious within the contemplation of 35 U.S.C. 103(a). Reconsideration and

Serial No.: 10/658,708

allowance of claims 11-14 is therefore respectfully solicited.

Conclusion

Every effort has been made to amend applicant's claims in order to define his invention in the scope to which it is entitled. Accordingly, reconsideration and allowance of claims 1-14 is respectfully solicited.

Respectfully submitted,

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